Houston Independent School District Grade 8 Public Schools

Snapshot Report

NCES 2007-455XH8

The National Assessment of Educational Progress (NAEP) assesses science in two major dimensions: Fields of Science (Earth, Physical, and Life) and Knowing and Doing Science (Conceptual Understanding, Scientific Investigation, and Practical Reasoning). The NAEP science scale ranges from 0 to 300. Scales are created separately for each grade. In 2005, Houston Independent School District was one of ten urban districts that voluntarily participated in the NAEP science assessment on a trial basis.

Overall Science Results for Houston

- In 2005, the average scale score for eighth-grade students in Houston was 130. This was lower than the average score in the nation (147).¹
- Houston's average score (130) in 2005 was not significantly different from that of public schools in large central cities (132).²
- The percentage of students in Houston who performed at or above the NAEP *Proficient* level was 12 percent in 2005. This percentage was smaller than that in large central cities (15 percent).
- The percentage of students in Houston who performed at or above the NAEP Basic level was 35 percent in 2005. This percentage was smaller than that in large central cities (39 percent).

Houston (public) 2005 65 23 11 1 Large central city (public) 2005 61* 24 14* 2 Nation (public) 2005 43* 30* 24* 3* Percent below Basic Percent at Basic, Proficient, and Advanced Below Basic Basic Proficient Advanced

NOTE: The NAEP grade 8 science achievement levels correspond to the following scale points: Below *Basic*, 142 or lower; *Basic*, 143–169; *Proficient*, 170–207; *Advanced*, 208 or above.

Performance of NAEP Reporting Groups in Houston: 2005									
	Percent	Average	Percent	Percent of stud	ents at or above	Percent			
Reporting groups	of students ³	score	below Basic	Basic	Proficient	Advanced			
Male	50	131	63	37	13↓	1			
Female	50	129	67	33	11	1			
White	10↓	166 🕇	23	77	51↑	8			
Black	30↓	121	75	25	6	#			
Hispanic	56↑	127↑	69	31	7	#			
Asian/Pacific Islander	3↓	#	‡	‡	‡	‡			
American Indian/Alaska Native	#	‡	‡	‡	‡	‡			
Eligible for free/reduced-price school lunch	72↑	123	73	27	6	#			
Not eligible for free/reduced-price school lunch	28↓	147	45	55	27	4			

Average Score Gaps Between Selected Groups

- In 2005, male students in Houston had an average score that was not significantly different from that of female students. In large central cities, the average score for male students was higher than that of female students by 3 points.
- In 2005, Black students had an average score that was lower than that of White students by 46 points. This performance gap was wider than that of the large central cities (39 points).
- In 2005, Hispanic students had an average score that was lower than that of White students by 39 points. In large central cities, the average score for Hispanic students was lower than that of White students by 35 points.
- In 2005, students who were eligible for free/reduced-price school lunch, an indicator of poverty, had an average score that was lower than that of students who were not eligible for free/reduced-price school lunch by 24 points. In large central cities, the average score for students who were eligible for free/reduced-price school lunch was lower than the score of those not eligible by 28 points.
- In 2005, the score gap between students at the 75th percentile and students at the 25th percentile was 46 points. In large central cities, the score gap between students at the 75th percentile and students at the 25th percentile was 50 points.

Science Scale Scores at Selected Percentiles

Scale Score Distribution

	25 th Percentile	50 th Percentile	75 th Percentile
Houston	107	130	153
Large central city (public)	107	132	157 *
Nation (public)	124 *	150 *	172 *

Scores at selected percentiles on the NAEP science scale indicate how well students at lower, middle, and higher levels performed. For example, the data above show that 75 percent of students in public schools nationally scored below 172, while 75 percent of students in Houston scored below 153.

- ‡ Reporting standards not met.
- * Significantly different from Houston.
- † Significantly higher than large central cities. ↓ Significantly lower than large central cities.

[#] The estimate rounds to zero.

¹ Comparisons (higher/lower/not different) are based on statistical tests. The .05 level was used for testing statistical significance. Comparisons across jurisdictions and comparisons with the nation or within a jurisdiction across years may be affected by differences in exclusion rates for students with disabilities (SD) and English language learners (ELL). The exclusion rates for SD and ELL in Houston Independent School District were 4 percent and 3 percent in 2005, respectively. Statistical comparisons are calculated on the basis of unrounded scale scores or percentages.

² "Large central city" includes public schools located in large central cities (population 250,000 or more) within metropolitan statistical areas as defined by the federal Office of Management and Budget. It is not synonymous with "inner city."

³ For comparison, non-White students comprised 77 percent of students in large central city public schools and 40 percent in public schools nationally. Also, students eligible for free/reduced-price school lunch comprised 62 percent of students in large central city public schools and 39 percent in public schools nationally. NOTE: Detail may not sum to totals because of rounding and because the "Information not available" category for free/reduced-price school lunch and the "Unclassifed" category for race/ethnicity are not displayed. Visit http://nces.ed.gov/nationsreportcard/science/tuda.asp for additional results and detailed information. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Trial Urban District Science Assessment.